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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,361	08/17/2001	Gerard Chauvel	TI-31362	4872

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EXAMINER

HASHEM, LISA

ART UNIT PAPER NUMBER

2645

DATE MAILED: 12/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/932,361		CHAUVEL ET AL.	
	Examiner		Art Unit	
	Lisa Hashem		2645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

FINAL DETAILED ACTION

1. Regarding claims 1-4, 8-11, and 15, please see the rejection(s) cited in the Non-Final Office Action filed on 6-16-2005.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 5-7 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sunakawa in view of Durham.

Regarding claim 5, Sunakawa discloses a method for controlling an execution of multiple tasks in a processing circuit (Fig. 1) including a plurality of processing modules (Fig. 1: 31, 32, 33, 34, 35, 36) (see Abstract; col. 1, lines 42-60; col. 5, line 65 – col. 6, line 3; see Figure 2), comprising the steps of:

generating a task allocation scenario (e.g. priority scheduling) for allocating multiple tasks among the plurality of processing modules;

prior to executing the tasks, estimating temperature-associated information (e.g. power) in the processing circuit as would occur if the tasks were executed according to the scenario (col. 2, lines 16-26; col. 9, line 25 – col. 10, line 35);

determining whether a power threshold would be exceeded by executing the tasks according to the scenario (col. 8, lines 42-54; col. 10, line 36 – col. 12, line 24).

Sunakawa does not disclose estimating temperature-associated information for various locations in the processing circuit; and determining whether a temperature threshold would be exceeded.

Durham discloses a method for controlling an execution of multiple tasks (e.g. operations) in a processing circuit (Fig. 1) including a plurality of processing modules or functional units (see Abstract; Fig. 1; col. 3, lines 17-54), comprising the steps of: allocating multiple tasks among the plurality of processing modules (col. 1, line 60 – col. 2, line 6); prior to executing the tasks (col. 4, lines 20-31), estimating temperature-associated information for various locations in the processing circuit (col. 3, line 55 - col. 4, line 31); and determining whether a temperature threshold would be exceeded by executing the tasks (col. 4, lines 31-61).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Sunakawa to include estimating temperature-associated information for various locations in the processing circuit; and determining whether a temperature threshold would be exceeded by executing the tasks according to the scenario as taught by Durham. One of ordinary skill in the art would have been lead to make such a modification to determine whether a temperature threshold would be exceeded by executing tasks according to a scenario.

Regarding claim 6, the method of claim 5 mentioned above, wherein Sunakawa

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further discloses said step of generating a task allocation scenario inherently comprises the step of receiving a task list describing the tasks to be executed and a task model describing the tasks (col. 9, line 54 – col. 10, line 2).

Regarding claim 7, the method of claim 6 mentioned above, wherein Sunakawa further discloses the task model inherently includes initial area-specific power dissipation estimates for each task (col. 9, line 54 – col. 10, line 2; col. 13, lines 39-47), wherein it is possible to calculate the power dissipation from measured and probabilistic power consumption (as noted in the Specification of the instant application '09/932361': page 11, lines 16-21).

Regarding claims 12-14, please see the rejections to claims 5-7 above, respectively, to reject the processing circuit in claims 12-14.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

5. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

6. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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7. Claims 1-15 are provisionally rejected on the ground of nonstatutory double patenting over claims 1, 4-7, 10-12, 14-20, and 22-26 of copending Application No. 09/932,136. This is a provisional double patenting rejection since the conflicting claims have not yet been patented. The disclosure and the pending claims of the referenced copending application and the instant application are claiming common subject matter, as follows: controlling executing of multiple tasks in a processing circuit including several processing modules.

Response to Arguments

8. Regarding Applicant's arguments, filed 8-31-2005, with respect to the rejection(s) of claim(s) 1-4, 8-11, and 15, Applicant argues that Durham does not disclose '...modify parameters for executing tasks on one or more adjacent processing modules in order to reduce heat generated by the adjacent processing modules...'. Examiner disagrees. Durham clearly discloses the claimed limitation in col. 4, lines 32-61. Wherein, tasks are executed on one or more adjacent processing modules, the next set of tasks can be executed on the first processing module when the localized heating problem is reduced in the first module, therefore the one or more adjacent processing modules will not have an increased heating problem.

9. Applicant's arguments with respect to claims 5-7 and 12-14 have been considered but are moot in view of the new ground(s) of rejection.

10. Accordingly, this action is **FINAL**.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

12. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- U.S. Patent No. 6,738,888 by Chauvel
- U.S. Patent Nos. 6,751,706, 6,901,521, 6,889,330 by Chauvel et al

14. Any response to this action should be mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Or faxed to:

(571) 273-8300 (for formal communications intended for entry)

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Or call:

(571) 272-2600 (for customer service assistance)

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Hashem whose telephone number is (571) 272-7542. The examiner can normally be reached on M-F 8:30-5:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (571) 272-7547. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LH

lh

November 27, 2005


FAN TSANG
SUPERVISORY PATENT EXAMINER
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